

CLAIMS

What is claimed is:

1. An electronic thermometer comprising:

5 a removable module having a memory, wherein said memory stores calibration information; and
a temperature calculating unit.

2. An electronic thermometer comprising:

10 a removable module having a memory, wherein said memory stores temperature probe identifying information; and
a temperature calculating unit.

15 3. An electronic thermometer according to claim 1 wherein said memory is capable of electrical communication with said temperature calculating unit when said removable module is installed to said temperature calculating unit.

20 4. An electronic thermometer according to claim 1 wherein said calibration information includes at least two calibration reference point parameters wherein each of said at least two calibration reference point parameters are taken at different temperatures.

5. A method of identifying a removable temperature probe in an electronic thermometer comprising the steps of:

25 storing probe-identifying information in a memory chip;
connecting said memory chip to said temperature probe;
removably connecting said temperature probe and memory chip to a temperature calculating unit; and
communicating said probe-identifying information from said memory chip to said temperature calculating unit.

6. An electronic thermometer comprising:

at least one removable module;

at least one temperature calculating unit;

5 means for storing probe identifying information within said at least one removable module; and

means for communicating said probe identifying information between said means for storing and said temperature calculating unit.

10 7. An electronic thermometer according to claim 1 wherein said memory includes an EEPROM.

8. An electronic thermometer according to claim 1 wherein said memory is a 256 bit, 1-Wire, parasite-power, EEPROM.

15 9. An electronic thermometer according to claim 1 wherein said removable module includes means for storing probe-specific algorithm parameters.

20 10. An electronic thermometer according to claim 1 wherein said memory is encapsulated within said removable module.

11. An electronic thermometer according to claim 1 wherein said memory is incorporated in a probe assembly of said removable module.

25 12. An electronic thermometer according to claim 11 wherein connections to said memory are protected from fluid incursion.

13. An electronic thermometer according to claim 11 wherein said memory is disposed in a connector portion of a probe cable assembly of said removable module.

14. An electronic thermometer according to claim 1 wherein said removable module includes a probe assembly incorporated therewith, said probe assembly comprising a temperature probe, an electrical cable and a first connector component, and wherein said first connector
5 component includes fluid resistant mating terminals providing electrical connections to said probe and said memory wherein said memory is incorporated within said probe assembly.

15. An electronic thermometer according to claim 14 wherein said memory is overmolded within said first connector component.

16. An electronic thermometer according to claim 14 wherein said temperature calculating unit includes a header assembly incorporated therewith, said header assembly including header terminals in electrical connection with a microprocessor system, said header assembly matable with said first connector component of said removable module.

17. An electronic thermometer according to claim 16 wherein said header assembly is fluid resistant, said header assembly preventing fluid incursion to said microprocessor system.

18. An electronic thermometer according to claim 14 wherein said probe includes at
20 least one thermistor electrically connected with said terminals, and wherein said calibration information includes resistance values of each of said at least one thermistor, said resistance values corresponding to at least two different reference temperatures.

19. An electronic thermometer according to claim 14 wherein said memory stores
25 temperature probe identifying information.

20. An electronic thermometer according to claim 19 wherein said probe identifying information includes a unique identification number associated with said temperature probe.

21. An electronic thermometer according to claim 20 wherein said unique identification number is a pre-programmed and validated EEPROM registration number.

22. An electronic thermometer comprising:

5 a temperature calculating unit; and

a removable module;

wherein said removable module includes a probe assembly incorporated therewith, said probe assembly comprising a temperature probe, a cable having a first end connected to said temperature probe and a second end connected to a connector portion; wherein said connector portion includes fluid resistant mating terminals providing electrical connections to said probe and, a memory wherein said memory is incorporated within said probe assembly;

wherein said memory stores temperature probe identifying data and temperature probe calibration data, said temperature probe identifying data including a unique identification number associated with said temperature probe;

wherein said temperature probe includes at least one thermistor electrically connected with said mating terminals and wherein said temperature probe calibration information includes resistance values of each of said at least one thermistor, said resistance values corresponding to at least two different reference temperatures; and

wherein said temperature calculating unit includes a header assembly incorporated therewith, said header assembly including header terminals in electrical connection with a microprocessor system, said header assembly matable with said connector portion of said removable module, wherein said header assembly is fluid resistant, said header assembly preventing fluid incursion to said microprocessor system.